

Shenzhen Kuruijie Communication Technology Co., LTD

Antenna Test Report

1.Explanation of part number:

Supplier: **Kuruijie**

Frequency: 699-960Hhz, 1710-2170Mhz,2500-2690Mhz

Antenna Material: FPC

Antenna model: PIFA

2.Electrical Specification:

2-1. Frequency Band:

Frequency	MHz
LTE	703-960MHz , 1710-2170MHz , 2500-2690MHz

Project model:T322E

Frequency Band: GSM B2/3/5/8+WCDMA-B2/4/5/8
+FDD B2/4/5/7/26/28/66-TDD B38

Bluetooth: 2.4GHZ

Date: 2025/04/23

ADD: 5C Building, Units 407-409, Huaqiang Creative
Industry Park, Biyan Community, Guangming Street,
Guangming District, Shenzhen, China.

1.Test Project

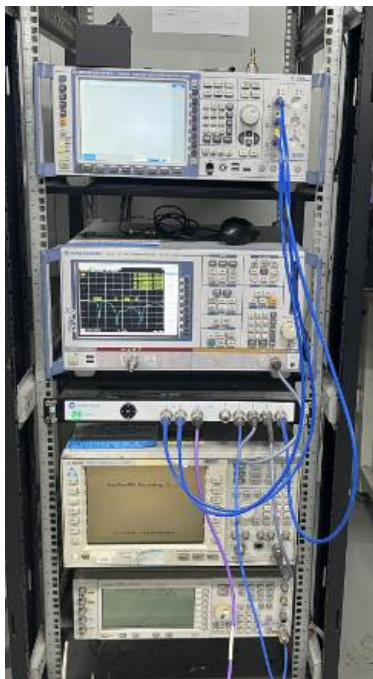
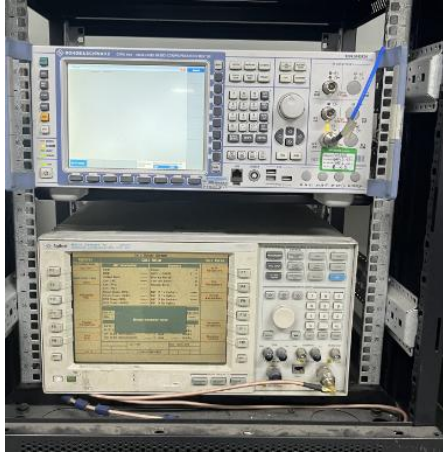
	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G+BT)	1. power 2. level 3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

2.Test Equipment

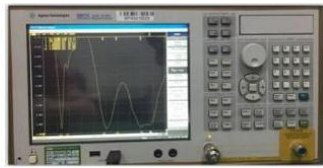


CMW 500 (2G/3G/4G Test Equipment)

3. TestEnvironment



Antenna debugging equipment



E5071C



HP8753D



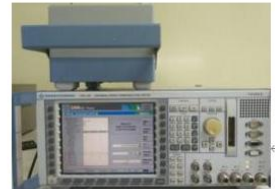
ROHDE&SCHWARZ-ZVL



ROHDE&SCHWARZ



HP885046A

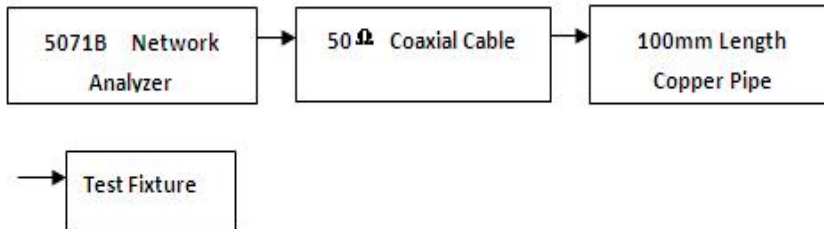


CMU200

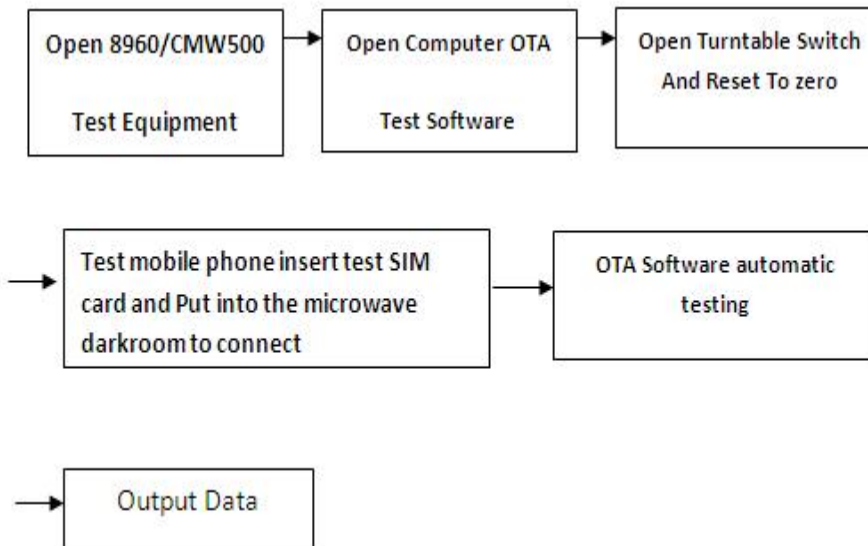
Our company has a number of OTA test darkrooms, ranging from 400MHz to 8.5ghz, which can provide passive test and active test (including OTA overall 2G,3G,4G,5GFR test, WiFi multi-mode test, GPS active test, Bluetooth active test, which can provide antenna gain and efficiency. 2D orientation and apple chart analysis and upper and lower hemisphere efficiency values, mutual disturbance correlation coefficient test items

4.Test Steps

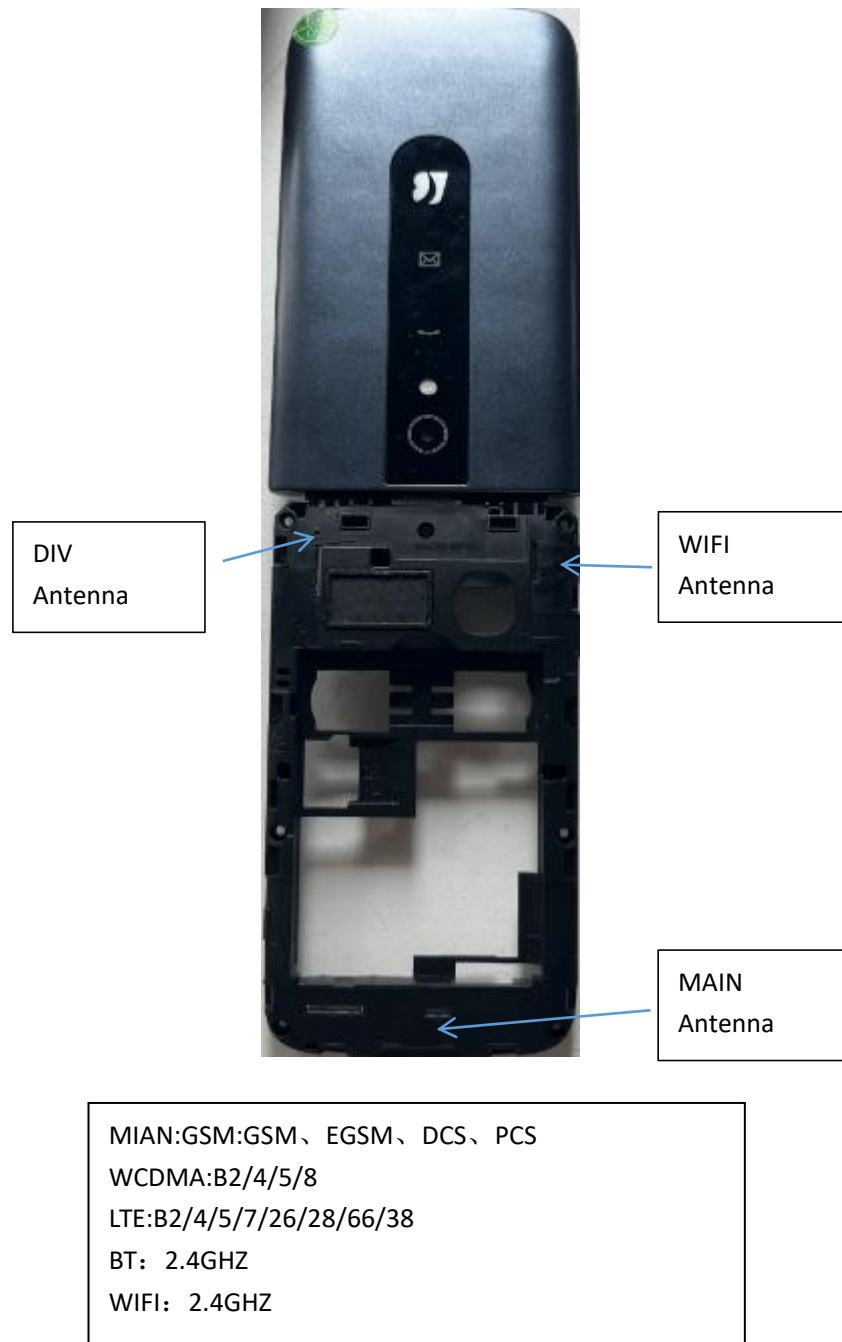
Passive VSWR/RL Test Steps:



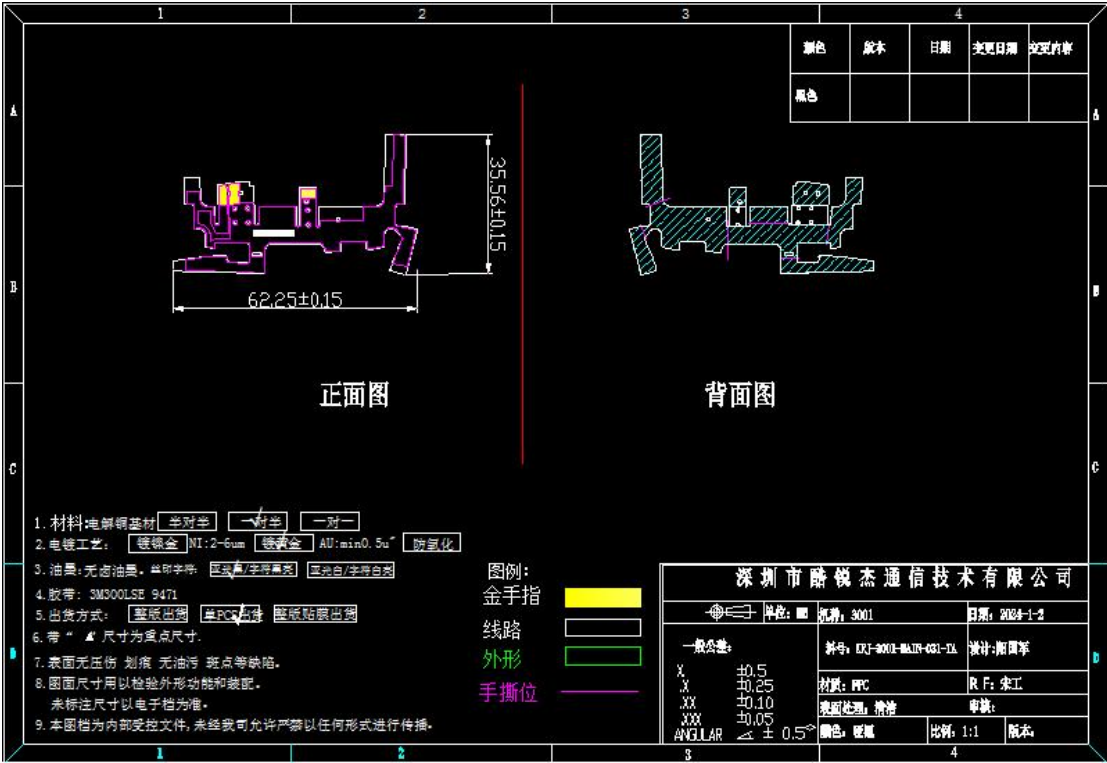
Active TRP/TIS Test Steps:

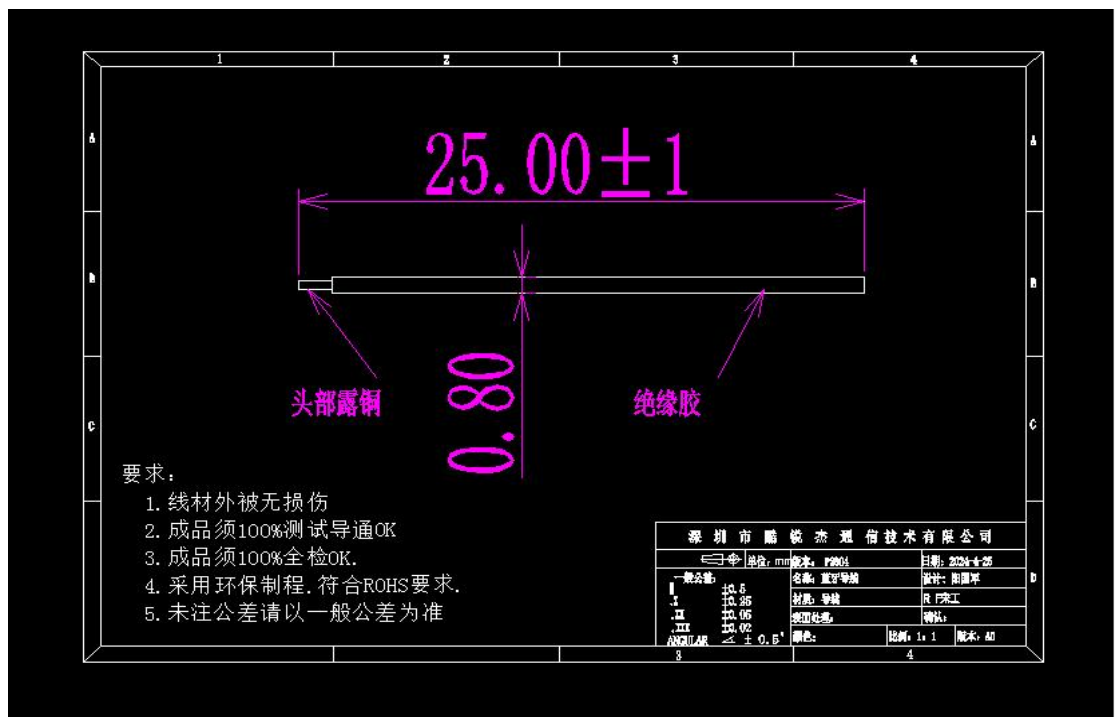


5. Antenna Placement



6.Antenna Dimensions



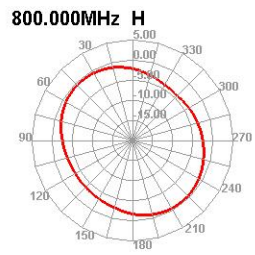
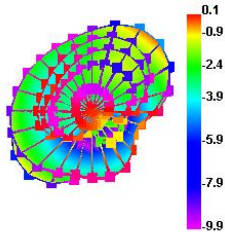


6. Antenna Gain

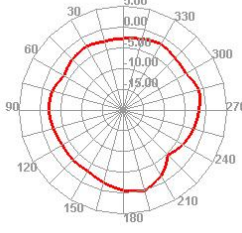
Frequency	Gain(dBi)
GSM850	-0.5
EGSM900	-0.6
DCS1800	0.8
PCS1900	0.9
WCDMA B2	0.9
WCDMA B4	0.8
WCDMA B5	-0.5
WCDMA B8	-0.6
FDD B2	0.9
FDD B4	0.8
FDD B5	-0.5
FDD B7	1.3
FDD B26	-0.5
FDD B28	-1.1
FDD B66	0.8
TDD B38	1.3
BT	0.47
WIFI	1.45

7. 3D Lobe Diagram (1)

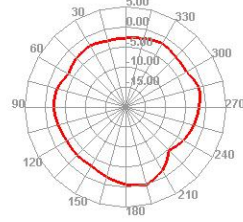
800.000MHz



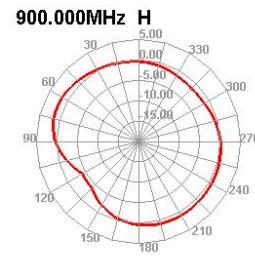
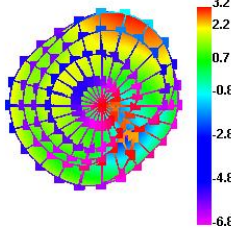
800.000MHz E1



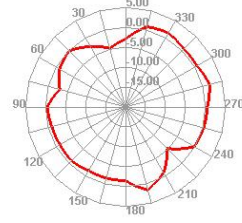
800.000MHz E1



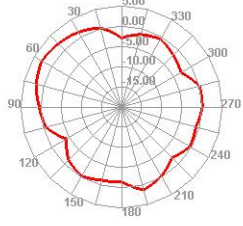
900.000MHz



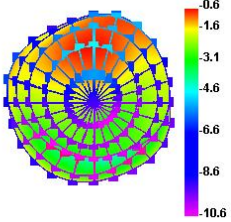
900.000MHz E1



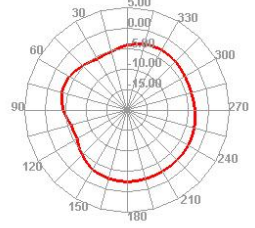
900.000MHz E2



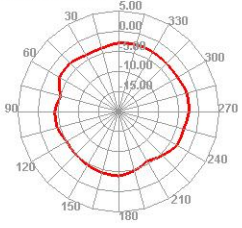
950.000MHz



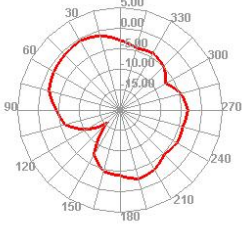
950.000MHz H



950.000MHz E1

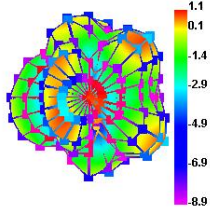


950.000MHz E2

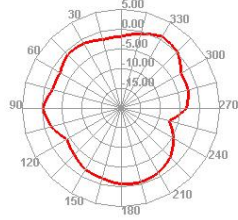


8. 3D Lobe Diagram (2)

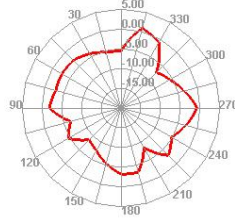
1700.000MHz



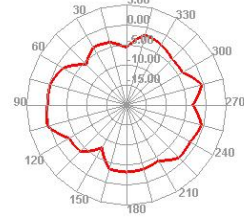
1700.000MHz H



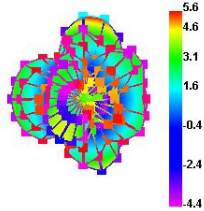
1700.000MHz E1



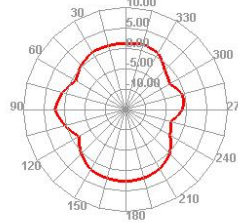
1700.000MHz E2



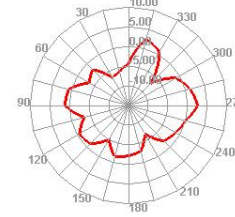
1800.000MHz



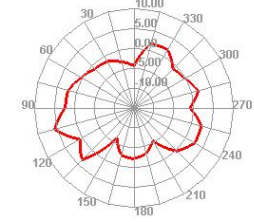
1800.000MHz H



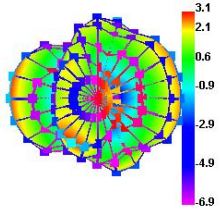
1800.000MHz E1



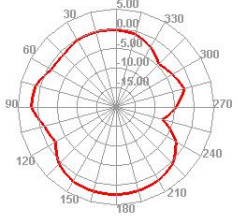
1800.000MHz E2



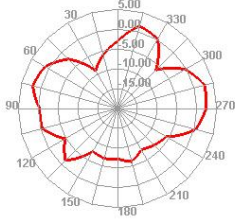
1900.000MHz



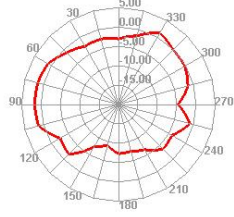
1900.000MHz H



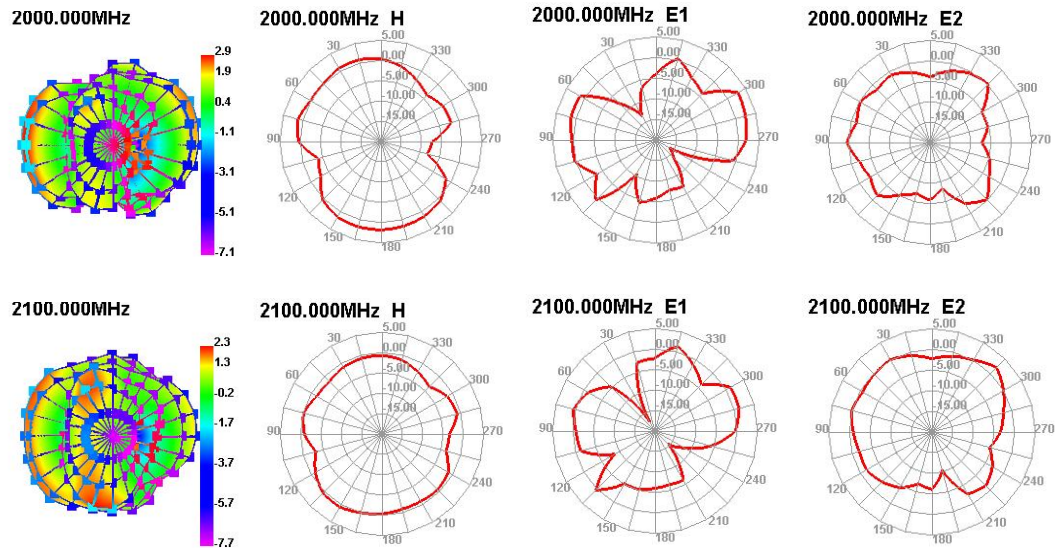
1900.000MHz E1



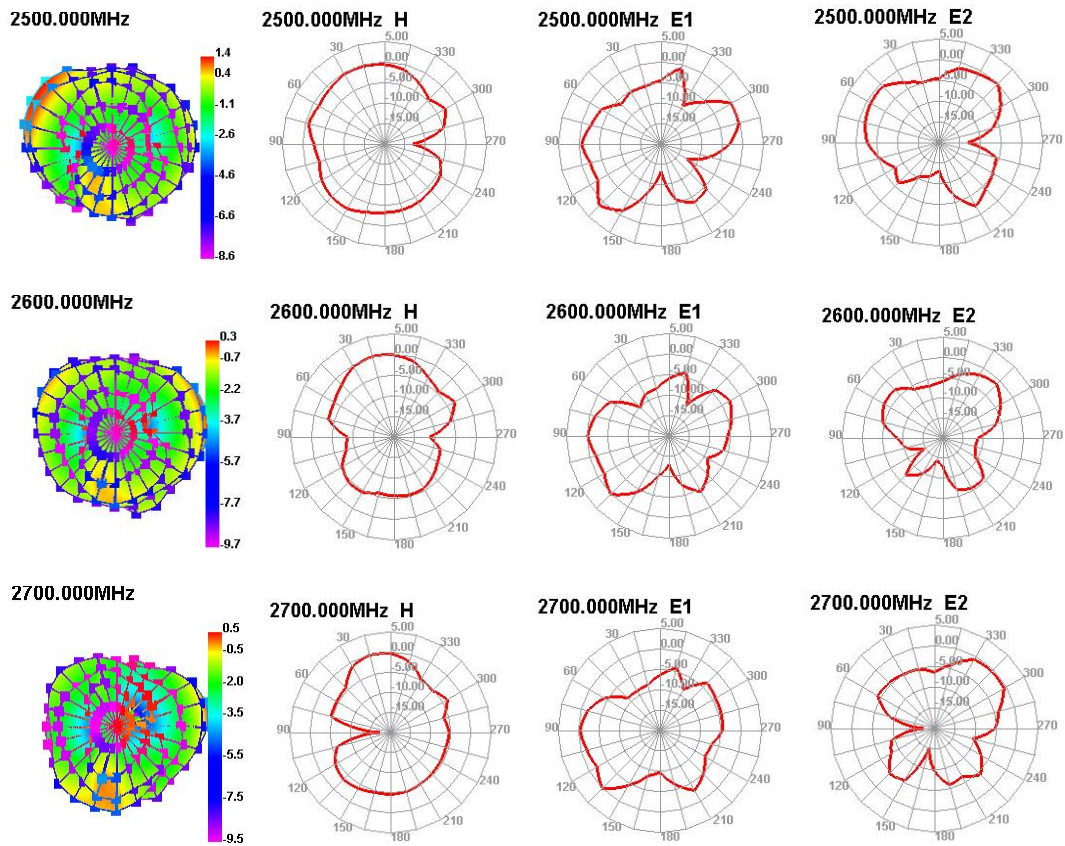
1900.000MHz E2



9. 3D Lobe Diagram (3)

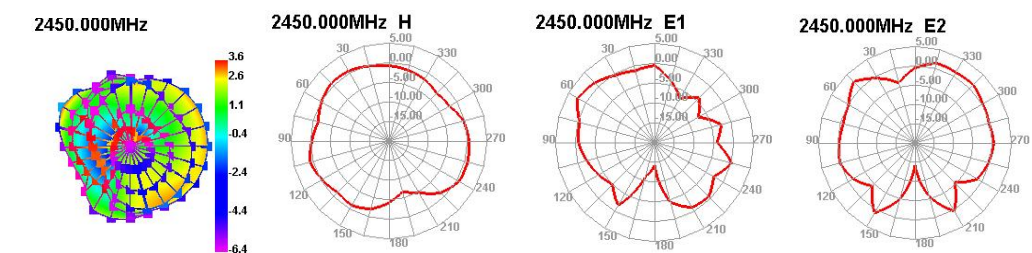


10. 3D Lobe Diagram (4)



11. 3D Lobe Diagram (5)

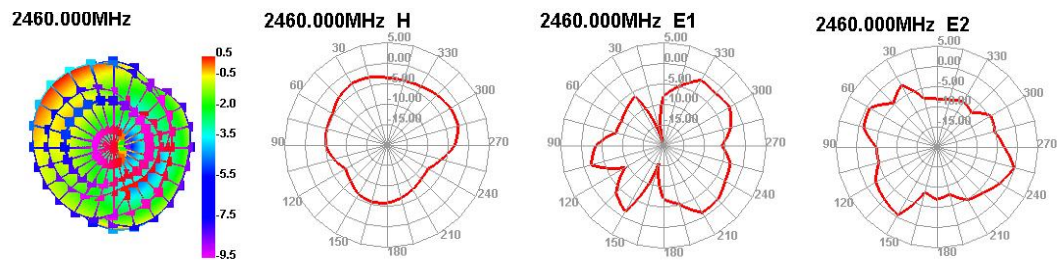
WIFI:



Freq	Effi	Gain
(MHz)	(%)	(%)
2400	39.9	1.11
2410	39.99	1.13
2420	45.45	1.41
2430	45.65	1.45
2440	41.49	1.22
2450	40.9	1.15
2460	39.25	1.04
2470	38.97	1.09
2480	38.96	1.12
2490	37.78	1.01
2500	38.48	1.12

12. 3D Lobe Diagram (6)

BT:



Freq (MHz)	Effi (%)	Gain (dBi)
2400	31.26	0.3
2410	31.78	0.31
2420	37.31	0.45
2430	35.43	0.33
2440	33.94	0.40
2450	37.34	0.47
2460	34.17	0.41
2470	34.58	0.44
2480	33.1	0.37
2490	34.22	0.42
2500	33.57	0.32